

REMARKS

The Final Office Action dated February 27, 2007, has been fully considered. The present Response is intended to be a complete response thereto and to place the case in condition for allowance.

Applicant gratefully acknowledges the courtesy of a personal interview on July 9, 2007, in which Examiner Tran and Applicants' counsel, Minh-Quan K. Pham (Registration No. 50,594), discussed the present invention, the pending rejections and the cited prior art references. The Examiner suggested amending the claims to show the ratio of surfactant to ethylcellulose and to file a declaration showing the formulations of the present invention shows immediate release.

Claims 28-35, 37-47, and 49-51 are pending. Claims 1-27, 36, and 48 have been cancelled. Claims 28, 30, 33, 34, and 44 have been amended. Support for the amendment to claims 28, 33, and 44 is found in the specification on page 7, lines 20-22, and Example 1. Claims 30 and 34 have been amended to delete redundant limitations.

THE RESTRICTION IS IMPROPER

The Examiner alleges that claims 41, 42, and 50 are "drawn to an invention that is independent and distinct from the invention originally claimed," because the original claims are drawn to capsules, while claims 41, 42, and 50 are drawn to tablets. Applicants respectfully traverse the restriction. First, contrary to the Examiner's assertion, the original claims are not limited to capsules. None of the independent claims, which have already been examined by the Examiner, are limited to capsules. Second, claims 41, 42, and 50 depend from claims that have already been examined by the Examiner. As such, their consideration does not require an undue

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burden on the Examiner. Therefore, Applicants respectfully requests withdrawal of the restriction.

THE CLAIMS CONTAINS WRITTEN DESCRIPTION

Claims 29, 34, 36, 45, and 48 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The rejection is moot with regard to claims 36 and 48, because these claims have been cancelled. Applicants respectfully traverse the rejection with regard to the remaining claims 29, 34, and 45.

With regard to claims 34, the Examiner alleges that the claims does not provide support for the ratio of 1.00 : 1.65 (Polysorbate 80:ethylcellulose). Applicant has amended the independent claim from which claim 34 depends to properly recite a ratio to “1.00:0.165” which has support in the specification in Example 1 as noted by the Examiner.

With regard to claims 29 and 45, the Examiner alleges that the specification does not provide support for capsule as an outer layer that further comprises one or more excipients. Applicant respectfully submits that claims 28 and 44, from which claims 29 and 45 depend from, respectively, have been amended to remove excipients.

Therefore, Applicants respectfully submit that the claims are support by the specification. Accordingly, withdrawal of the rejections is earnestly solicited.

THE CLAIMS ARE ENABLED

Claims 28-40, 43-49, and 51 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to enable a normal release coating. Applicants respectfully traverse the rejection.

The term “normal release” has been amended herein to recite “immediate release” instead. The Examiner discussed the *Wands* factors and concluded that one skilled in the art cannot practice the present invention without undue experimentation. For the Examiner’s convenience, the *Wands* factors are as follows:

- (1) The nature of the invention;
- (2) The state of the prior art;
- (3) The level of one of ordinary skill;
- (4) The level of predictability in the art;
- (5) The breadth of the claims;
- (6) The amount of direction provided by the inventor;
- (7) The existence of working examples; and
- (8) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

In re Wands, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

Factors 2 and 3 clearly favor enablement of the present invention as, according to the Examiner, the state of the art and the ordinary skill in the art are high.

With regard to factor 4, the Examiner cites Dahlinder et al. to show that ethylcellulose is often used as a coating polymer to provide controlled release of active ingredient. Applicant respectfully submits that this is not the teaching of Dahlinder et al. who teach beads coated with a polymeric membrane for modifying and controlling drug release according to various release profiles depending on the porosity of the drug. Column 3, lines 10-13. However, the release may be “with or without lag time” (column 3, line 14). As such, ethylcellulose can be used to release the drug without lag time, i.e. immediate release. Dahlinder et al. merely uses ethylcellulose as a

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means to controlling the release of the drug, which does not necessarily eliminate immediate release. The composition of Dahlinder et al., thus, can be engineered to effect immediate release or “controlled release” (“controlled release” is commonly used in the art to disclose slow release of a drug over an extended period of time (Buxton et al., column 2, lines 1-5)) by varying the permeability of the coating layer. Column 3, lines 20-24. Therefore, contrary to the Examiner’s assertion, Dahlinder et al. shows that ethylcellulose can be used in either immediate release or controlled release formulations. Whether or not the formulation is controlled release or immediate release depends on other components of the formulation, e.g. HPMC. Column 3, lines 20-23. Therefore, Dahlinder et al. clearly support that an immediate release formulation can include ethylcellulose.

With regard to factors 6 and 7, applicant clearly shows how to make the invention. To do so one follows the steps of the claims. First, make a coating solution of ethylcellulose, an organic solvent, and a surfactant, where the ratio of the surfactant to the ethylcellulose is 1.00:0.165. Second, coating a drug substance with the organic solvent where the coating allows immediate release in the GI. And finally, forming a unit dosage with the coated drug. The unit dose may be a capsule or a tablet. Examples of different formulations are also disclosed Example 1. However, the Examiner alleges that dissolution profile is not disclosed in for those formulations. Applicants filed herewith a Declaration by Yatish Kumar Bansal showing that the formulations of Example 1 show release of more than 90% of active ingredient in just 45 minutes. This is significantly faster than the release rate of Buxton et al. which takes 20 hours to release 90% of its drug (Table 4), and of Chen et al. which takes more than 21 hours to release 90% of its drugs Figs. 1-3. Thus, the inventor provides extensive direction and working examples (factors 6 and 7) on how to make the invention.

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In the Office Action, the Examiner points to the specification and alleges that the specification is contrary to the claims where it teaches a coating film of HPMC to help retard against degradation. This disclosure refers to the degradation of the active ingredient and not the dissolution (release) of the drug. Thus, this disclosure is completely consistent with the claims, as the claims are concerned not only with the dissolution of the drug, but also the stability of the active ingredient, for example during storage. On page 7 of the specification, Applicants clearly state

We have also considered a coating agent which would provide excellent protection against moisture and at the same time immediately release the drug in the gastro-intestinal environment, as desired.

With regard to factor 8, the Examiner merely concludes that “it would require an [sic] undue experimentation by one of ordinary skill in the art to make and use the claimed invention” without any reasoning. This is not in comport with the law. *In re Wright* 31 USPQ2d 1510, 1513 (examiner must provide a reasonable explanation for a holding of lack of enablement); *see also* MPEP 2164.04. Nevertheless, Applicants respectfully submit that the Examiner’s conclusion is without support. First, as noted by the Examiner in factors 2 and 3, the state and skill of the art is high, which means that the experimentation required to practice the invention by a person skilled in the art is likely routine. One skilled in the art would only have to ascertain the dissolution rate of a formulation to practice the claimed invention. This is clearly within the high skill level of one of ordinary skill in the art. Further, “an extended period of experimentation may not be undue if the skilled artisan is given sufficient direction or guidance.” *In re Colianni*, 195 USPQ 150, 153 (CCPA 1977). Here, methodologies to perform dissolution profiles are replete within the prior art. *See, e.g.*, Patel et al., Buxton et al., Chen et al., and

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Dahlinder et al. Therefore, the experimentation required to make and use the present invention is not undue.

For the reasons noted, at least six (factors 2, 3, 4, 6, 7, and 8) of the eight *Wands* factors weigh heavily in favor of the enablement of the immediate release composition of the present invention. Accordingly, Applicant respectfully requests withdrawal of the rejection.

THE CLAIMS ARE NOT OBVIOUS

Claims 28-40, 43-49, and 51 stand rejected under 35 U.S.C. § 103(a) as being obvious over Buxton et al. (U.S. Patent No. 5,601,845), in view of Patel et al. (U.S. Patent No. 6,248,363) and Chen et al. (U.S. Patent No. 6,270,805).

The cited references, take alone or in combination, fail to disclose every element of the claimed invention. In particular, none of the cited references disclose immediate release formulation having a ratio of surfactant to ethylcellulose of 1.00:0.165, which is recited in the present independent claims.

Additionally, there is no rationale in the cited references or in the art in general to modify the teachings of Buxton et al and Chen et al. to make an immediate release formulation. *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) (obviousness “analysis should be made explicit.”); MPEP 2142 (“The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done.”). Neither Buxton et al. nor Chen et al. teach immediate release (i.e., non-controlled release) drug product formulations using an ethylcellulose and surfactant coating where the ratio of surfactant to ethylcellulose is 0.165:1.00, nor do they suggest or imply such a drug product. Moreover, neither patent suggests an ethyl cellulose and surfactant coating that is adapted to providing a normal release formulation with aqueous

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stability during storage or granulation/formulation. These deficiencies are discussed in detail in the Amendment filed December 1, 2006.

Further, Patel et al. teaches using the claimed polymer for “a variety of reasons,” including “particle porosity reduction, reduce dust, chemical protection, mask taste, reduce odor, and the like (see col. 42, lines 22-28). Patel et al. identify the use of ethyl cellulose (see col. 42, lines 28-32) as follows:

....water soluble cellulose ethers are preferred for this application.
HPMC and ethyl cellulose in combination, or Eudragit E100 are particularly suitable for taste masking applications....

There is no teaching by Patel et al. of an immediate release formulation or a coating having a ratio of surfactant ethylcellulose of 1.00:0.165.

Given the above, it cannot be concluded that the cited references, alone or in combination, provide to a person of ordinary skill in the art at the time of the invention the necessary rationale to modify the invention in Buxton et al., a controlled-release formulation, to arrive at the claimed immediate release formulation that improves the stability of the drug in storage by coating the drug with the disclosed coating. One of ordinary skill in the art would not have been motivated to modify or combine the references to arrive at the instant invention because the references do not disclose nor suggest a immediate release formulation, nor even suggest aqueous stability. Rather they only discuss formulating a water-soluble drug to control the release profile of the active ingredient.

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CONCLUSION

In the event there are any questions relating to this Amendment or to the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney concerning such questions so that the prosecution of this application may be expedited.

Please charge any shortage or credit any overpayment of fees to BLANK ROME LLP, Deposit Account No. 23-2185 (124907-00107). In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this response, Applicants hereby petition under 37 CFR 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized above.

Respectfully submitted,

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